Figure 1A

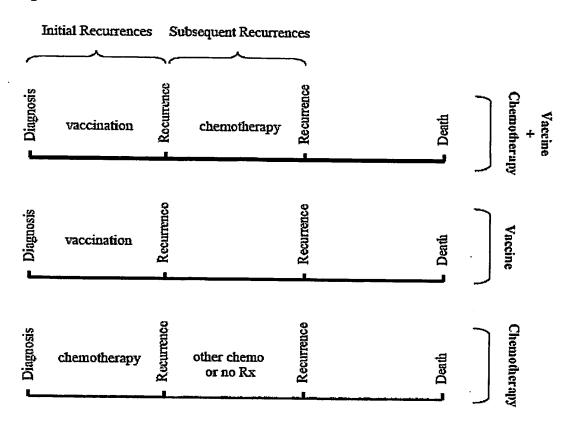


Figure 1B

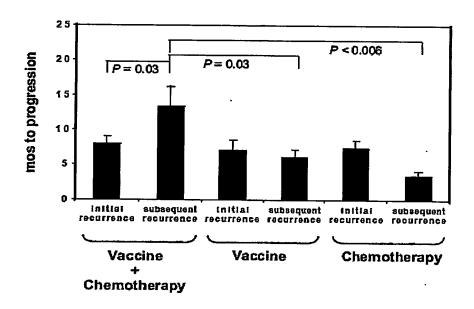


Figure 2

WO 2005/043155

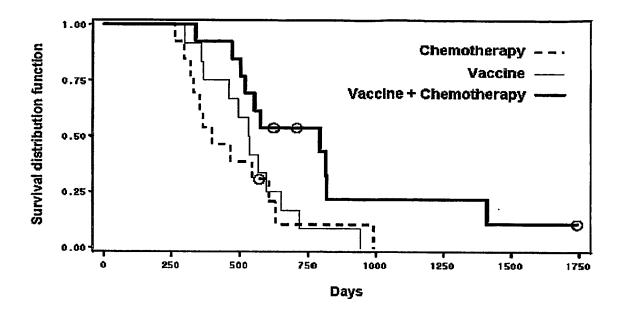


Figure 3

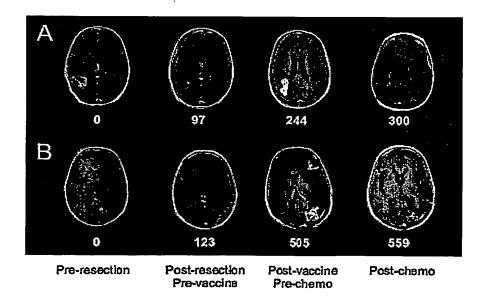
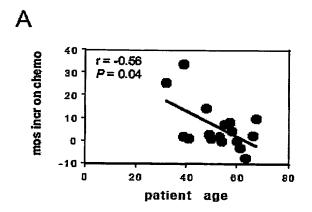


Figure 4



B

0
40
10
10
10
10
100
1000
10000
10000

TREC/50K CD8+ T cells

Figure 5

	Vaccine	Chemotherapy	Vaccine + Chemotherapy	Significance (p)
Age	53.4 ± 13	55.7 ± 10	54.0 ± 10	0.88 *
Post-vaccine Kamofsky Score	84 <u>+</u> 16	*	93 <u>+</u> 9	0.12 *
% nuale	50	38	77	0.14 †
% non-survivors	100	92	77	0.3 f
% > 2 surgeries before vaccine	58.3	-	61.5	0.43 †
% no chemo before vaccine	66.7	-	61.5	0.58 †
% no surgery after vaccine	58.3	-	53.8	1.0 †
Days from surgery to vaccine	115 ± 14	-	121 ± 13	0.94 ¶
Mean survival (months)	17.9 ± 1.7	15.9 ± 2.1	26 ± 3.7	0.047 ¶
% 2-year survival (fraction)	8.3 (1/12)	8.3 (1/12)	41.7 (5/12)	> 0.05 †; < 0.05 **
% 3-year survival (fraction)	0 (0/12)	0 (0/12)	18.2 (2/11)	> 0.05 †; < 0.01 **

'Statistical methods: * ANOVA; † Fisher's Exact Test; ¶ Log-rank; ** Binomial distribution. Calculations of % 2- and 3-year survival excluded censored values.

Figure 6

	Phase I A	Phase I B	Phase II
Vaccine	7 pts	3 pts	2 pts
Vaccine + chemotherapy	I pts	2 pts	10 pts
Autigen source	Tumor line MHC I-elution	Tumor lysate	Tumor lysate
Vaccine course	3; 2 wks apart	3; 2 wks apart	3; 2 wks apart ÷ 1; 6 wks later
Eligibility Diagnosis Kamofsky score	de novo GBM, de novo AA ≥ 60	da novo or recurrent GBM, AA ≥ 60	de novo or recurrent GBM, AA ≥60
Age	≥ 18 yr	≥ 13 vr	≥ 18 vr
CTL Responsiveness (GBM only)	60% *	60% †¶	40% ¶

¹CTL responsiveness was determined from 5 testable samples per trial: * Bulk CTL assay; † Elispot, ¶ IFN-γ production by qPCR.

Figure 7

Vaccine + Chemotherapy	Pt #	Drug(s)	
	1	Gliadel wafers	
	2	Temozolamide	
	3	Temozolamide	
	4	Temozolamide	
	5	Temozolamide, Irinotecan	
	6	Temozolamide	
	7	Temozolamide, Accutane	
	8	Tamoxifen	
	9	Temozolamide, CCNU	
	10	Temozolamide, Accutane	
	11	Temozolamide, Gleevec	
	12	Temozolamide, Procarbazine, CCNU, Vincristine	
	13	Temozolamide, Thalidomide, Etoposide	
Chemotherapy			
	1	Temozolamide	
	2	Temozolamide	
	3	Temozolamide, Procarbazine	
	4	Temozolamide, Carboplatin, Vincristine, Procarbazine	
	5	Temozolamide, BCNU, Thalidomide	
	6	Temozolamide, Procarbazine	
	7	Temozolamide	
	8	Temozolamide, Thalidomide	
	9	Gliadel wafers, Vincristine	
	10	Temozolamide, Carboplatin, Vincristine	
	11	BCNU, Temozolamide	
	12	Gliadel wafers, Temozolamide	
	13	BCNU	